Session 5C: Circulation, Currents and Water Properties

Questions & Answers

Parker MacCready
[Question not recorded.]

A: There are two answers to that. The surface current is easy. It comes to the surface and it immediately takes a GPS position once it's in the surface position. It goes through a calculation and it makes a cell phone call and then it takes another GPS position about 3 minutes later so if we just measure the time in between those two and we know the distance, then we get our velocities that way. The depth average current is a little bit more complicated. It relies on a model of the performance of the glider, so we're measuring the buoyancy that we give it, we also measure its orientation so basically we know what the glider should do throughout a dive and then we difference that with what it actually did do between surface positions.

Q: Have you compared your results with the model that is in the Puget Sound model?

A: No, I have not done that yet, but that's a good idea, I'll head right over there.

Kathleen Edwards
Q: When can we expect SAR on our desk, like we can get AVHRR?

A: The problem is that I don't think you will be able to get SAR right out of the box like you can Sea Surface Temperature, because the images are actually privately owned. Is that what you are asking?

Q: Well, I am just kind of an end-point user, and every time I go to try and get AVHRR I can get it on a lot of web sites, but Seattle is kind of cloudy so I don't get much use out of it and it's 1 km resolution, but SAR is going to be 2, 3, 5 meter resolution and it's going to be everyday. We are going to have SAR pretty often and right now we are working on getting currents every kilometer worldwide, every few days, so I was just trying to get a feel for when we can expect to get it free?

A: Actually I don't use it because you have to pay for it. I know that they are doing a testing, the Alaska coast watch where they are making images available to people who are doing numerical models, as a test of how they would distribute it, but I think that's all in its infancy.

Q: I know Mitsuhiro didn't talk about his model. That covers all of Puget Sound. Is that going to be available online so that somebody can get it for anytime they want?

A: I think that the real time modeling shown in a geographic model always begs the question of how you would present the model. I don't think we could as yet do a web site in which I could just click and say, "This is the state of the model that appears right now."

Q: Are we going to have more of the amp measurements, kind of like Mitsuhiro goes out every few months? Is there going to be some routine measurements of mixing?

A: The person to talk to is Mike or Matthew down there, but there is a program is funded for them to study these intrusions in the main basin of Puget Sound, so yes. They have also been doing some work in Hood Canal coming up in late March early April, we are going to be going over to Hood Canal and taking some measurements with a SWIMS, an instrument that goes up and down the through water column and profiles.